AMENDMENTS TO THE CLAIMS

A detailed listing of all claims that are, or were, in the present application, irrespective of whether the claim(s) remains under examination in the application are presented below. The claims are presented in ascending order and each includes one status identifier.

1. (Original) A microporous membrane comprising:

a membrane body portion having a multiplicity of micropores defined therethrough, the membrane body portion having a liquid contact surface and an opposing gas contact surface, the liquid contact surface having an ultraphobic surface thereon including a substrate with a multiplicity of substantially uniformly shaped asperities, each asperity having a common asperity rise angle relative to the substrate, the asperities positioned so that the ultraphobic surface defines a contact line density measured in meters of contact line per square meter of surface area equal to or greater than a contact line density value "$\Lambda_L$" determined according to the formula:

$$\Lambda_L = \frac{-P}{\gamma \cos\left(\theta_{a,0} + \omega - 90^{\circ}\right)}$$

where $\gamma$ is the surface tension of a liquid in contact with the surface in Newtons per meter, $\theta_{a,0}$ is the experimentally measured true advancing contact angle of the liquid on the asperity material in degrees, $\omega$ is the asperity rise angle in degrees, and P is a predetermined liquid pressure value in kilograms per meter, so that when liquid at a liquid pressure up to and including the predetermined liquid

pressure value is contacted with the ultraphobic surface, the liquid defines a liquid/gas interface plane spaced apart from the substrate.

2. (Original) The membrane of claim 1, wherein the membrane is a film.

3. (Original) The membrane of claim 1, wherein the membrane is a fiber.

4. (Original) The membrane of claim 1, wherein the asperities are projections.

5. (Original) The membrane of claim 4 wherein the asperities are polyhedrally shaped.

6. (Original) The membrane of claim 4 wherein each asperity has a generally square transverse cross-section.

7. (Original) The membrane of claim 4, wherein the asperities are cylindrical or cylindroidally shaped.

8. (Original) The membrane of claim 1, wherein the asperities are positioned in a substantially uniform array.

9. (Original) The membrane of claim 8, wherein the asperities are positioned in a rectangular array.

10. (Original) The membrane of claim 1, wherein the asperities have a substantially uniform asperity height relative to the substrate portion, and wherein the asperity height is greater than a critical asperity height value "$Z_c$" in meters determined according to the formula:

$$Z_c = \frac{d\left(1 - \cos\left(\theta_{a,0} + \omega - 180^\circ\right)\right)}{2 \sin\left(\theta_{a,0} + \omega - 180^\circ\right)}$$

where d is the distance in meters between adjacent asperities, $\theta_{a,0}$ is the experimentally measured true advancing contact angle of the liquid on the asperity material in degrees, and $\omega$ is the asperity rise angle in degrees.

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